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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/600,701	06/23/2003	Richard Newton Hill JR.		5740

7590 01/31/2007  
RICHARD NEWTON HILL, JR.  
1960 EMMITSBURG RD.  
GETTYSBURG, PA 17325

EXAMINER
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FREAY, CHARLES GRANT

ART UNIT	PAPER NUMBER
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3746

MAIL DATE	DELIVERY MODE
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01/31/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

<b>Interview Summary</b>	Application No.	Applicant(s)	
	10/600,701	HILL, RICHARD NEWTON	
	Examiner	Art Unit	
	Charles G. Freay	3746	

All participants (applicant, applicant's representative, PTO personnel):

- (1) Charles G. Freay. (3) \_\_\_\_\_  
 (2) Richard Hill. (4) \_\_\_\_\_

Date of Interview: 17 January 2007.

Type: a) ☒ Telephonic b) ☐ Video Conference  
 c) ☐ Personal [copy given to: 1) ☐ applicant 2) ☐ applicant's representative]

Exhibit shown or demonstration conducted: d) ☐ Yes e) ☒ No.  
 If Yes, brief description: \_\_\_\_\_

Claim(s) discussed: proposed new claims.

Identification of prior art discussed: \_\_\_\_\_

Agreement with respect to the claims f) ☐ was reached. g) ☒ was not reached. h) ☐ N/A.

Substance of Interview including description of the general nature of what was agreed to if an agreement was reached, or any other comments: The examiner e-mailed Mr. Hill propped amendments which define over the prior art. The claims clearly define the structure which has been indicated as being allowable, including the vent passageway in the reciprocating piston. See attached proposed claims.

(A fuller description, if necessary, and a copy of the amendments which the examiner agreed would render the claims allowable, if available, must be attached. Also, where no copy of the amendments that would render the claims allowable is available, a summary thereof must be attached.)

THE FORMAL WRITTEN REPLY TO THE LAST OFFICE ACTION MUST INCLUDE THE SUBSTANCE OF THE INTERVIEW. (See MPEP Section 713.04). If a reply to the last Office action has already been filed, APPLICANT IS GIVEN A NON-EXTENDABLE PERIOD OF THE LONGER OF ONE MONTH OR THIRTY DAYS FROM THIS INTERVIEW DATE, OR THE MAILING DATE OF THIS INTERVIEW SUMMARY FORM, WHICHEVER IS LATER, TO FILE A STATEMENT OF THE SUBSTANCE OF THE INTERVIEW. See Summary of Record of Interview requirements on reverse side or on attached sheet.

Examiner Note: You must sign this form unless it is an Attachment to a signed Office action.

  
 Examiner's signature, if required

## Summary of Record of Interview Requirements

### Manual of Patent Examining Procedure (MPEP), Section 713.04, Substance of Interview Must be Made of Record

A complete written statement as to the substance of any face-to-face, video conference, or telephone interview with regard to an application must be made of record in the application whether or not an agreement with the examiner was reached at the interview.

### Title 37 Code of Federal Regulations (CFR) § 1.133 Interviews

#### Paragraph (b)

In every instance where reconsideration is requested in view of an interview with an examiner, a complete written statement of the reasons presented at the interview as warranting favorable action must be filed by the applicant. An interview does not remove the necessity for reply to Office action as specified in §§ 1.111, 1.135. (35 U.S.C. 132)

#### 37 CFR §1.2 Business to be transacted in writing.

All business with the Patent or Trademark Office should be transacted in writing. The personal attendance of applicants or their attorneys or agents at the Patent and Trademark Office is unnecessary. The action of the Patent and Trademark Office will be based exclusively on the written record in the Office. No attention will be paid to any alleged oral promise, stipulation, or understanding in relation to which there is disagreement or doubt.

The action of the Patent and Trademark Office cannot be based exclusively on the written record in the Office if that record is itself incomplete through the failure to record the substance of interviews.

It is the responsibility of the applicant or the attorney or agent to make the substance of an interview of record in the application file, unless the examiner indicates he or she will do so. It is the examiner's responsibility to see that such a record is made and to correct material inaccuracies which bear directly on the question of patentability.

Examiners must complete an Interview Summary Form for each interview held where a matter of substance has been discussed during the interview by checking the appropriate boxes and filling in the blanks. Discussions regarding only procedural matters, directed solely to restriction requirements for which interview recordation is otherwise provided for in Section 812.01 of the Manual of Patent Examining Procedure, or pointing out typographical errors or unreadable script in Office actions or the like, are excluded from the interview recordation procedures below. Where the substance of an interview is completely recorded in an Examiners Amendment, no separate Interview Summary Record is required.

The Interview Summary Form shall be given an appropriate Paper No., placed in the right hand portion of the file, and listed on the "Contents" section of the file wrapper. In a personal interview, a duplicate of the Form is given to the applicant (or attorney or agent) at the conclusion of the interview. In the case of a telephone or video-conference interview, the copy is mailed to the applicant's correspondence address either with or prior to the next official communication. If additional correspondence from the examiner is not likely before an allowance or if other circumstances dictate, the Form should be mailed promptly after the interview rather than with the next official communication.

The Form provides for recordation of the following information:

- Application Number (Series Code and Serial Number)
- Name of applicant
- Name of examiner
- Date of interview
- Type of interview (telephonic, video-conference, or personal)
- Name of participant(s) (applicant, attorney or agent, examiner, other PTO personnel, etc.)
- An indication whether or not an exhibit was shown or a demonstration conducted
- An identification of the specific prior art discussed
- An indication whether an agreement was reached and if so, a description of the general nature of the agreement (may be by attachment of a copy of amendments or claims agreed as being allowable). Note: Agreement as to allowability is tentative and does not restrict further action by the examiner to the contrary.
- The signature of the examiner who conducted the interview (if Form is not an attachment to a signed Office action)

It is desirable that the examiner orally remind the applicant of his or her obligation to record the substance of the interview of each case. It should be noted, however, that the Interview Summary Form will not normally be considered a complete and proper recordation of the interview unless it includes, or is supplemented by the applicant or the examiner to include, all of the applicable items required below concerning the substance of the interview.

A complete and proper recordation of the substance of any interview should include at least the following applicable items:

- 1) A brief description of the nature of any exhibit shown or any demonstration conducted,
- 2) an identification of the claims discussed,
- 3) an identification of the specific prior art discussed,
- 4) an identification of the principal proposed amendments of a substantive nature discussed, unless these are already described on the Interview Summary Form completed by the Examiner,
- 5) a brief identification of the general thrust of the principal arguments presented to the examiner,  
(The identification of arguments need not be lengthy or elaborate. A verbatim or highly detailed description of the arguments is not required. The identification of the arguments is sufficient if the general nature or thrust of the principal arguments made to the examiner can be understood in the context of the application file. Of course, the applicant may desire to emphasize and fully describe those arguments which he or she feels were or might be persuasive to the examiner.)
- 6) a general indication of any other pertinent matters discussed, and
- 7) if appropriate, the general results or outcome of the interview unless already described in the Interview Summary Form completed by the examiner.

Examiners are expected to carefully review the applicant's record of the substance of an interview. If the record is not complete and accurate, the examiner will give the applicant an extendable one month time period to correct the record.

### Examiner to Check for Accuracy

If the claims are allowable for other reasons of record, the examiner should send a letter setting forth the examiner's version of the statement attributed to him or her. If the record is complete and accurate, the examiner should place the indication, "Interview Record OK" on the paper recording the substance of the interview along with the date and the examiner's initials.

# ATTACHMENT

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## PROPOSED

### EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Richard Hill on January 18, 2007.

The application has been amended as follows:

Claims 22-44 are canceled.

New claims 45- are added below:

-- 45.( new) A wave actuated submersible pump for use in an open body of water, said wave actuated submersible pump comprising,

a pump cylinder having an open top end and a bottom end, the bottom end attached to a lower plate for securing said pump to the floor of the open body of water,

an inlet check valve and an outlet check valve connected to openings in the pump cylinder near the lower plate, said inlet check valve allowing for the intake of water from the body of water and said outlet check valve controlling the flow of water from the pump to a remote location,

a weighted piston vertically reciprocally movable within the pump cylinder and forming a pump chamber defined by said cylinder, said weighted piston and said lower plate,

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a buoy connected to the weighted piston by a flexible connector for driving the weighted piston on an upward stroke in response to wave action, said weighted piston being driven in a downward stroke under force of gravity,

a means for restricting the upward stroke of the weighted piston mounted adjacent to the open top end of the pump cylinder,

a mooring guide and wear ring mounted to the top open end of the pump cylinder, said flexible connector passing through said mooring guide and wear ring and being attached to the top of the weighted piston at a first end and to a lifting eye of the buoy at a second end, and

said weighted piston including an air vent passageway, a check valve ball and an air vent chamber for allowing air entrapped within the pump chamber to vent through the air vent passageway and out the open top of the pump cylinder.

46 .(new) The wave actuated submersible pump of claim 45 wherein said flexible connector is a chain.

47. (new) The wave actuated submersible pump of claim 45 wherein said flexible connector is a cable.

48. (new) The wave actuated submersible pump of claim 45 wherein said means for restricting the upward stroke of the weighted piston is a plurality of stop pins which are securely attached and pass through openings adjacent said open top end of the pump cylinder.

49. (new) The wave actuated submersible pump of claim 45 wherein said lower plate is a bottom plate suitable for imbedding the pump cylinder in the floor of the open body of water.

50. (new) The wave actuated submersible pump of claim 45 wherein said lower plate is a bottom flange plate for securing the pump cylinder to submerged foundations at the floor of the open body of water.

51. (new) The wave actuated submersible pump of claim 45 wherein said weighted piston includes sealing rings to provide a seal against the pump cylinder.

52. (new) The wave actuated submersible pump of claim 45 wherein said buoy includes a mooring eye used to stabilize the direction of travel of the buoy.

53. (new) The wave actuated submersible pump of claim 45 wherein the water pumped by the submersible pump is delivered from the outlet check valve to a hydro-electric power plant including a reservoir which stores the pumped water and then delivers it to hydro-electric generators. --